

Title (en)

BATTERY CELL AND ELECTRONIC DEVICE

Title (de)

BATTERIEZELLE UND ELEKTRONISCHE VORRICHTUNG

Title (fr)

ÉLÉMENT DE BATTERIE ET DISPOSITIF ÉLECTRONIQUE

Publication

EP 3937270 A4 20240117 (EN)

Application

EP 20712817 A 20200121

Priority

- CN 201910143584 A 20190226
- CN 2020073587 W 20200121

Abstract (en)

[origin: US2021218051A1] The present application relates to a battery cell and an electronic device. The battery cell according to an embodiment comprises: an electrode assembly, including an electrode plate; and a shell, receiving the electrode assembly and including a first edge seal, a second edge seal and a circular edge seal connecting the first edge seal and the second edge seal, wherein the circular edge seal defines a virtual circular arc region with a radius R and a radian angle \varnothing , wherein the electrode plate has a first edge, a second edge, and a third edge connecting the first edge and the second edge, and a virtual extension line of the first edge and a virtual extension line of the second edge intersect to form a virtual intersection point A; a point on the third edge has a minimum distance L relative to the virtual intersection point A; and the virtual extension lines of the first edge and the second edge form a corner at the virtual intersection point A toward the third edge, and an angle of the corner is greater than 0 degrees and less than 180 degrees. The battery cell and the electronic device provided by the present application have higher safety performance, a higher space utilization ratio and a higher energy density.

IPC 8 full level

H01M 10/0585 (2010.01); **H01M 50/102** (2021.01); **H01M 50/463** (2021.01); **H01M 50/105** (2021.01)

CPC (source: EP US)

H01M 10/0413 (2013.01 - US); **H01M 10/0436** (2013.01 - US); **H01M 10/058** (2013.01 - US); **H01M 10/0585** (2013.01 - EP); **H01M 50/102** (2021.01 - EP); **H01M 50/183** (2021.01 - US); **H01M 50/463** (2021.01 - EP US); **H01M 50/105** (2021.01 - EP US)

Citation (search report)

- [X1] US 2016372783 A1 20161222 - MIN KI HONG [KR], et al
- [X1] US 2016056495 A1 20160225 - MINAGATA ATSUSHI [JP], et al
- [X1] JP 2013134881 A 20130708 - TOYOTA IND CORP
- See also references of WO 2020173268A1

Designated contracting state (EPC)

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DOCDB simple family (publication)

US 11444331 B2 20220913; **US 2021218051 A1 20210715**; CN 109873092 A 20190611; CN 109873092 B 20201023; EP 3937270 A1 20220112; EP 3937270 A4 20240117; JP 2022500834 A 20220104; JP 7102613 B2 20220719; WO 2020173268 A1 20200903

DOCDB simple family (application)

US 202016652521 A 20200121; CN 201910143584 A 20190226; CN 2020073587 W 20200121; EP 20712817 A 20200121; JP 2021516419 A 20200121